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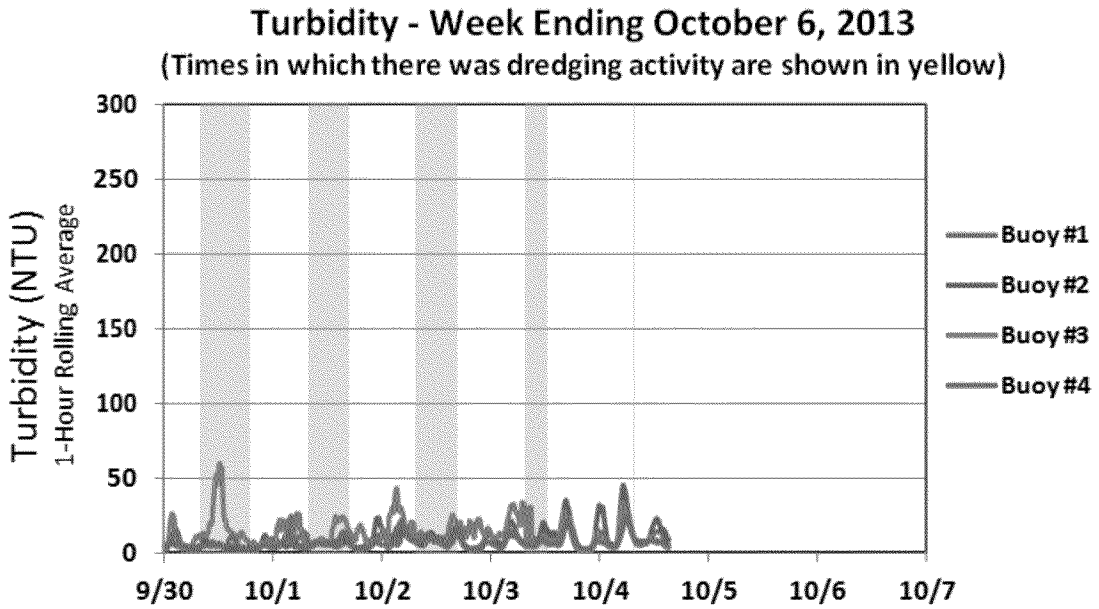
To: Hoppe, Michael[Hoppe.Michael@epa.gov]; Vaughn, Stephanie[Vaughn.Stephanie@epa.gov]
From: Stan Kaczmarek<StanK@demaximis.com>
Sent: Wed 10/9/2013 6:05:15 PM
Subject: September 30 Turbidity Data
LPR 093013 Report No. 67.doc

Mike,

As requested, I investigated to determine if dredging activity could have led to the high turbidity reading in Buoy #3 midday on September 30.

The graphic from the public report shows that Buoy #3 turbidity peaked over 50 NTU and >30 NTU above Buoy #1, even when viewed as a 1-hour moving average.



The detailed data for the period in question shows that there was a rise in Buoy #3 turbidity readings that started during ebb flows (when compliance involves a comparison of buoy #2 to its upstream counterpart, buoy #4) and continued past the tide change at 12:38 PM when the compliance point switched to a comparison of buoy #3 to buoy #1. At that point, buoy #3 turbidity exceeded 50 NTU and there was a delta of >30 NTU compared to buoy #1 that lasted for 2 monitoring periods, or 30 minutes. Because the turbidity dropped significantly after that (e.g. below 50 NTU), it did not trigger any actions on the part of CPG.

Buoy 1	Buoy 2	Buoy 3	Buoy 4	Buoy 5		
9/30/2013 13:45		3.6	2.9	37.4	3.7	2
9/30/2013 13:30		4.2	3.1	13.6	1.4	3.9

9/30/2013 13:15	4.8	3.2	63	3.2	2.1
9/30/2013 13:00	5.4	4.7	110	8.1	3.1
9/30/2013 12:45	4.1	5.4	32.5	11	4.6
Tide changes from ebb to flood at 12:38 PM					
9/30/2013 12:30	4.5	5.8	31.8	2.5	5.2
9/30/2013 12:15	4.8	5.5	46.7	3.5	5.1
9/30/2013 12:00	5.1	4.4	69.9	4.9	4.9
9/30/2013 11:45	5.6	4.2	57.9	4.9	9.2
9/30/2013 11:30	6.7	6.2	14.1	9.7	8.7

Also attached is the dredge report for this day. It indicates that there were two activities occurring that day... poling of the north extension to determine its dredge-ability, and dredging that began at Station 28+30 and ended at Station 30+00. The area for dredging is more than 800 feet south of buoy #3, and a silt curtain was in place around this dredge zone. This leads us to conclude that dredging was not responsible for the peak in buoy #3 turbidity that day. And poling which took place closer to buoy #3 is not an event that would re-suspend sediment.

Please contact me if you have any questions.

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